

## **MCHIP/Senegal**

### **Program Year 5 (PY5) Annual Report**

October 1, 2012 to September 30, 2013

### **Introduction**

Senegal experienced high immunization coverage in the early part of the decade, peaking at 94% in 2007 and steadily declining to 70% in 2010, with some regions showing coverage as low as 30%. This led to polio and measles outbreaks in 2009 and 2010. In September 2011, the GAVI Alliance approved Senegal's plan to introduce pneumococcal conjugate vaccine (PCV13) and the MenAfriVac™ vaccine (MenA). In response to declining DTP3 (diphtheria, tetanus, and pertussis third dose) coverage, and in preparation for the introduction of new vaccines, MCHIP was invited to lead and coordinate a multi-agency external Expanded Program on Immunization (EPI) review in 2010/11 to identify factors and system weaknesses that contributed to this decline. Following the review, MCHIP assisted the Ministry of Health (MOH) to present findings and recommendations that were then used to develop an implementation plan to strengthen the National Immunization Program. USAID/Senegal requested that MCHIP extend its technical assistance to help the MOH implement these recommendations, and to prepare for the introduction of the new lifesaving vaccines, by establishing an in-country presence.

MCHIP/Senegal provides technical support at the national level to the National Immunization Program and the Inter-Coordinating Committee (ICC) as the country prepares for new vaccines introduction, while guiding needed preparations at the operational level through USAID bilateral projects implemented by IntraHealth and ChildFund. The goal of MCHIP/Senegal is to work with the Expanded Program on Immunization (EPI) and partners to strengthen the routine immunization system in poor-performing districts, increase vaccination coverage, and introduce new, lifesaving vaccines (PCV13, MenA, and MR) nationwide.

The MCHIP/Senegal Immunization program worked to achieve the following objectives in Program Year 5 (PY5):

- **Objective 1:** Reinvigorate the routine immunization system to increase immunization coverage, maximize investments in new and underused vaccines, improve data quality and reduce inequities among hard-to-reach populations.
- **Objective 2:** Successfully introduce nationwide Meningitis A conjugate vaccine (MenAfriVac™) (conducted in 2012) and pneumococcal conjugate vaccine (PCV-13) by October 2013, and conduct a catch-up MR campaign by November 2013.

### **Summary of PY5 Achievements**

MCHIP/Senegal activities for PY5 (from October 1, 2012 to September 30, 2013) focused on planning for the introduction of new vaccines and championing sustained commitment and activities to strengthen the routine immunization system, as described below.

#### *Introduction of Meningitis A Conjugate Vaccine (MenAfriVac™)*

Among MCHIP/Senegal's milestones achieved during PY5 was the technical support the program provided for a successful vaccination campaign against meningococcal meningitis A with MenAfriVac™. With this campaign, conducted from November 12<sup>th</sup> to 21<sup>st</sup>, 2012, Senegal became the ninth country along the "Meningitis belt" to introduce this effective, low-cost vaccine. The campaign targeted 3.9 million people aged 1 to 29 years old in 35 districts and eight of Senegal's 12 regions, where the risk of spreading meningococcal meningitis A was the highest.



A poster promoting awareness of the national vaccination campaign for MenAfriVac™ in November 2012.

MCHIP played an active role in preparations for the MenAfriVac™ campaign: this included providing technical support and guidance during the introduction planning process at the regional and district levels; developing an activity monitoring checklist; and finalizing the guidelines and management tools used during the campaign. The program team also worked closely with partners ranging from the MOH to UNICEF to supervise and provide technical guidance during the campaign itself, and for monitoring and evaluation to later assess the quality of the campaign (including through preparing for a post-campaign immunization coverage survey).

From December 6<sup>th</sup> to December 10<sup>th</sup>, 2014, MCHIP/Senegal provided technical assistance for the post-campaign coverage survey that revealed the following:

- 95% of target population reached: In most health districts (immunization cards and immunization history);
- 91-94% coverage: In 12 out of a total 35 districts, in eight regions; and
- Only 7 districts with coverage <80% (based on immunization cards alone).

MCHIP contributed to campaign activities in eight of the country's 12 regions. Rigorous outreach, social mobilization activities, and tailored messaging to mobile populations—as well as to youth aged 15 to 29 years old, who had been notoriously hard to reach—contributed to the campaign's notable success.

#### *Participation in Interagency Coordinating Committee (ICC) Meetings*

During PY5, Senegal's Technical ICC convened numerous meetings to share findings from the recent national immunization coverage survey and logistics inventory; review workplans for pneumococcal conjugate vaccine (PCV13) introduction and the measles-rubella (MR) vaccine campaign; and prepare for the implementation of integrated national immunization days (NIDs).

MCHIP/Senegal's technical staff provided technical feedback and participated actively in these meetings, drawing from their extensive experience and expertise in supporting the nationwide introduction of new vaccines and helping to ensure country readiness. They also contributed to proposals to introduce the rotavirus and measles second dose vaccines, both planned by the ICC for 2014, for submission to the Global Alliance for Vaccines and Immunization (GAVI). Drafts of both proposals developed by the Technical ICC were approved by the ICC Policy Committee on July 9<sup>th</sup>, 2013 and submitted to GAVI's Board on September 15<sup>th</sup>, 2013.

#### *Strengthening Routine Immunization (RI)*

Results from Senegal's National Immunization Coverage Survey, conducted in March 2013 with MCHIP's technical support, were shared with all regional and district health teams during a national workshop from July 4<sup>th</sup> to 7<sup>th</sup>, 2013. This workshop was an opportunity to develop action plans to strengthen the immunization program at the district level using the Reaching Every District (RED) approach. During this workshop, national-level partners helped reviewed these action plans and expressed their commitment to supporting districts in implementing them. This included a commitment from MCHIP/Senegal, in partnership with USAID implementing partners IntraHealth and Child Fund, to supporting selected, poorer-performing districts in the Kaffrine and Louga regions.

A national logistics inventory was also conducted in January 2013 in further effort to strengthen Senegal's RI system. Key immunization partners in country have since been using the results of this inventory to collaboratively address cold chain gaps and address vehicle needs (e.g., for supervision visits and trainings), with financial support from the Government of Senegal, GAVI/(Health System Strengthening (HSS), and UNICEF. Follow-up will also include ensuring the availability of eight cold rooms this year.

In July 2013, Senegal's EPI organized joint, national-level supportive supervision visits with MCHIP's support. During these field visits, MCHIP/Senegal's technical staff helped review and further orient health workers on the use of EPI monitoring tools, vaccine storage, cold chain and waste management, microplan implementation and monitoring, using data to improve performance, and encouraging community participation in immunization activities. In follow-up to observations made during these visits, the program team then helped revise EPI management tools the following month.

### *Planning for New Vaccine Introduction*

In anticipation of PCV13 introduction (currently planned for October 2013) and MR campaign (planned for November 2013), Senegal's MOH has established a national organizing committee with four subcommittees: one on technical aspects of new vaccine introduction, another on logistics, a third devoted to communication activities, and fourth to be focused immunization surveillance and vaccine monitoring. These subcommittees have held working sessions to develop their workplans and tools, which were then shared and discussed during national workshop from July 8<sup>th</sup> to 12<sup>th</sup>, 2013. MCHIP/Senegal's technical staff and headquarters-based immunization advisors participated actively in this workshop, during which they also advocated for the use the Using Measles Activities to Strengthen Immunization and Surveillance (UMASIS tool) during and after implementation of the MR campaign.

These workplans and tools were rolled out in August and September 2013 (i.e., the third quarter of PY5), when MCHIP/Senegal provided technical support in orienting regional and district health teams to these workplans and tools. MCHIP's support focused on three regions—Kaffrine, Tambacounda, and Matam—and used their engagement as an opportunity to advocate for the importance of using measles activities to strengthen RI. In late September, MCHIP also supported technical reviews of district-level MR campaign microplans in Kaffrine, Louga, Tambacounda, and Diourbel regions. These regions were selected for targeted microplanning support based on their at-risk or difficult to reach populations, lower routine vaccination coverage, and challenges related to logistics, cold chain equipment availability, and waste management.

### *RI Strengthening Collaboration with IntraHealth and ChildFund*

As noted above, MCHIP/Senegal has begun planning discussions with USAID implementing partners IntraHealth and ChildFund to launch collaborative RI strengthening initiatives in a subset of districts in Senegal. Leveraging IntraHealth's leadership on *Projet du Renforcement des Programmes de Santé (RPS)* and ChildFund's leadership on *Programme Santé UN/SAID/Santé Communautaire II (PSSC II)*, in conjunction with MCHIP's immunization expertise, will aim to ensure coordination with national-level technical guidance and to strengthen linkages between the regional, district, health facility (*poste de santé*), and community levels. The RPS project is supporting the MOH to strengthen the delivery of an integrated package of health interventions, including immunization, in health areas, districts, and health posts. PSSCII, managed by ChildFund, focuses on providing community-level support for the extension and consolidation of community-based health service packages.

During the third and fourth quarters of PY5, representatives from all three partner organizations held meetings to determine selection criteria for districts where MCHIP/Senegal will provide technical assistance for RI strengthening activities. At this time, three target districts—Koki, Kounghoul, and Malled Hodde—have been selected on the basis of 2013 National Immunization Coverage Survey results, and discussions continue with USAID and others around the selection of a potential fourth target district. In the meantime, Koki and Kounghoul district health teams have shared their EPI results and action plans with community representatives, MCHIP, IntraHealth, and ChildFund. IntraHealth also led (and funded) health worker trainings in Koki, with technical support from MCHIP, during the fourth quarter of PY5. IntraHealth and PSSCII consortium partners will provide financial support for the implementation of district-level action plans in the coming weeks and months.

As Senegal's Ministry of Health advances its ambitious agenda to introduce several new vaccines in the coming months in years, representatives called upon MCHIP in early 2013 to support the EPI in revising the EPI Guide Book to include new vaccines planned for introduction in Senegal by 2014. These vaccines include rubella (in 2013), PCV1 (in 2013)3, rotavirus (in 2014), and HPV (in 2014). The guide books will be printed and distributed to vaccination health workers nationwide, with support from IntraHealth and UNICEF.

### *Trainings*

In April 2013, following revisions to the EPI Guide Book, MCHIP/Senegal's technical staff facilitated selected sessions of a national, mid-level management (MLM) training workshop for 20 MOH trainers. The master trainers then supervised cascade trainings for health care providers in four districts in the region of Dakar and two in the region of Kaolack, with financial support from IntraHealth.

In May 2013, MCHIP/Senegal also supported Professor Ousmane N'diaye of Senegal's National School of Medicine to participate in the WHO-led West African Regional EPI Curriculum Review meeting. Dr. N'diaye then invited MCHIP/Senegal's National Immunization Advisor to present on the EPI to pediatric medicine students and professors at the National Training School for Nurses and Midwives, with the aim to expose them to managerial and operational aspects of EPI based on MLM training modules. The presentation was so well received that it prompted an initiative to review the training curriculum of the medical school's immunization program to incorporate MLM training module components.

### *International Workshops*

Over the course in PY5, MCHIP/Senegal's technical staff participated in numerous events to contribute to the high-level dialogue on national, regional, and international immunization initiatives. This included two important meetings with regional EPI partners: a regional workshop on the Professionalization of Logistic Functions, held in Benin in October 2012, and the Annual Regional Conference on Immunization (ARCI) in Tanzania, in December 2012.

In February 2013, MCHIP also participated in a TechNet21 consultation meeting in Dakar, which brought together global leaders in immunization and served as an opportunity for the MCHIP/Senegal team to meet MCHIP's Immunization Team Lead, Dr. Robert Steinglass, who also participated. The team learned about technological innovations in immunization, and was invited by the USAID/Senegal Mission to participate in a field visit with representatives from USAID/Washington. The delegation observed USAID/Senegal-funded immunization activities implemented at the health facility level—including health workers' use of immunization registers and vaccine management, and cold chain performance—and at the community level—such as community health workers conducting immunization outreach.

Lastly, MCHIP/Senegal also participated in the March 2013 WHO West Africa EPI Managers Meeting in Ouagadougou, Burkina Faso, where they contributed the Senegal perspective to discussions to review country immunization programs, share new directions and guidelines for RI strengthening, and implement mass immunization campaigns and polio eradication programs. As part of these discussions, EPI and other immunization stakeholders encouraged reinvigorated surveillance of priority vaccine preventable diseases (e.g. measles, MNT, Meningitis A, and yellow fever), and participants strategizes on how represented countries can better integrate other health interventions to improve child survival.

## PY5 Achievement Highlights

Items	Achievements	Comments/ Next Steps
<b>MenAfriVac™ vaccination campaign</b>	<ul style="list-style-type: none"> <li>MCHIP provided technical support during a workshop to review district- and regional-level microplans, from October 8-10, 2012, and contributed to validation of training materials and other media campaign articles.</li> <li>MCHIP participated in official vaccination campaign launch in Kaffrine region and conducted supportive supervision visits in regions of Kaffrine and Diourbel.</li> <li>MCHIP participated in planning meetings for MenAfriVac™ coverage survey, contributed to survey tool revisions (e.g., immunization coverage survey procedures, guidelines, survey forms), and co-facilitated health supervisor trainings.</li> <li>Campaign results, based on immunization cards and immunization history as reported by individuals, showed satisfactory coverage rate of 95% in most health districts, with 12/35 districts demonstrating coverage between 91% and 94%. However, low card possession was also noted: 7/ 35 districts have coverage below 80%, according to immunization cards only.</li> </ul>	<ul style="list-style-type: none"> <li>Decision expected on introduction of MenAfriVac™ vaccine into EPI in 2015.</li> </ul>
<b>Technical ICC meetings</b>	<ul style="list-style-type: none"> <li>Results of national coverage survey and national logistic inventory shared, and decisions made to strengthen financial and technical support to poor-performing districts.</li> <li>MCHIP contributed to technical reviews of country multi-year strategic plan (cMYP), and to rotavirus and measles second dose vaccine proposals that were then approved by ICC Policy Committee and submitted to GAVI Board.</li> </ul>	<ul style="list-style-type: none"> <li>Awaiting results of proposal reviews by GAVI Board.</li> </ul>
<b>RI strengthening</b>	<ul style="list-style-type: none"> <li>National immunization coverage survey conducted in March 2013 revealed satisfactory results at national level, with coverage (card + history) of 92% for Penta3 (DTP-HepB-Hib) and 84% for measles. District-level performance was variable, however: 10/76 districts in Senegal have not reached 80% coverage of Penta3, and among these, some have "zero-dose" children at a higher proportion than national average of 1%. Results shared with regional and districts health teams for follow-up.</li> <li>MCHIP played an active role in RI strengthening activities in northern regions, including Louga, Matam, and Saint Louis, and in Kounghoul and Koki (which included participation in community workshop to share immunization data and action plans).</li> <li>All districts developed RI reinvigoration action plans, with MCHIP's technical support in target districts of Kounghoul, Mallem Hoddar (in Kaffrine region) and Koki (in Louga region).</li> <li>Based on results of national logistics inventory, UNICEF committed to installing cold room and new refrigerators in selected districts. MCHIP played a key role in advocating for highest-need districts.</li> <li>New 2.7 liter vaccines carriers and constant refrigerator temperature monitoring system with USB port installed, with UNICEF support.</li> <li>64 motorcycles provided to priority districts, through government and GAVI/HSS support. MCHIP helped influence this decision to allocate funding for logistics support, which is central to achieving RI results.</li> <li>Supportive supervision conducted at regional and district levels, and monitoring charts at service delivery points updated, with MCHIP support.</li> <li>EPI management tools revised with technical assistance from MCHIP, WHO, UNICEF, and other immunization partners.</li> </ul>	<ul style="list-style-type: none"> <li>Follow-up of action plan activities (with MCHIP/Senegal's support).</li> <li>Rollout of revised EPI management tools.</li> <li>Monitoring meetings to be convened at national and regional levels.</li> </ul>
<b>Planning for new vaccine introduction (PCV13, rotavirus, MCV2 and HPV)</b>	<ul style="list-style-type: none"> <li>MCHIP contributed to technical reviews of all 4 ICC sub-committee workplans developed to support PCV-13 introduction and MR catch-up campaign.</li> <li>MCHIP country and HQ technical staff participated in July 2013 workshop to develop tools (e.g., microplan template, training materials, data collection tools, communication materials) in preparation for MR campaign, and provided technical guidance and advocacy around use of UMASIS modules.</li> <li>Guidance provided to districts and regional health management teams for introduction of PCV and MR campaign, with MCHIP support.</li> <li>PCV-13 expected to be available end of September 2013 and delivered to regional and districts levels by October 2013.</li> <li>MCHIP helped facilitated a September 2013 workshop to review district- and regional-level microplans; this included contributing to session presentations on immunization outreach, cold chain and waste management, and need to reinvigorate RI system.</li> <li>cMYP revised, with MCHIP support, to include introduction of measles second dose and HPV vaccines (the latter of which MCHIP is not supporting,</li> </ul>	<ul style="list-style-type: none"> <li>Finalize, distribute, and orient health workers to RI strengthening job aids (to be introduced in time for MR campaign)</li> <li>Support national validation of district- and regional-level MR microplans</li> <li>Provide technical assistance for successful introduction of PCV13 into routine EPI (target date for official launch: November 5<sup>th</sup>, 2013).</li> <li>Provide technical assistance for successful implementation of MR campaign (Nov. 18<sup>th</sup>-27<sup>th</sup>, 2013).</li> </ul>

Items	Achievements	Comments/ Next Steps
	<p>per contractual limitations).</p> <ul style="list-style-type: none"> <li>GAVI proposals for introduction of rotavirus and measles second dose vaccines finalized, endorsed by ICC Policy Committee, and submitted to GAVI Board, with MCHIP support.</li> </ul>	
<b>Collaboration with USAID-funded RPS and PSSCII projects (via IntraHealth and ChildFund, respectively)</b>	<ul style="list-style-type: none"> <li>SOW for collaborative RI strengthening initiative jointly drafted by MCHIP, IntraHealth, and ChildFund, with MCHIP's leadership. Initiative to involve implementation of RED strategy in Kounghoul, Mallem Hoddar (in Kaffrine region), Koki, and Louga (in Louga region).</li> <li>Action plans developed by district health teams then shared at community level and implemented, beginning with training of health workers.</li> </ul>	<ul style="list-style-type: none"> <li>Some priority districts in Tambacounda, Kédougou, Matam, and Kolda regions to be supported by UNICEF/Senegal.</li> <li>Supportive supervision in priority districts (ongoing).</li> <li>Participation in district monitoring meetings (ongoing).</li> <li>Despite formal termination of data reporting strike in March 2013, health workers continue to strike in Louga.</li> </ul>
<b>Revision of and training on EPI curriculum</b>	<ul style="list-style-type: none"> <li>EPI guidebook reviewed, with technical assistance from MCHIP, to include information on rubella, PCV13, rotavirus, meningococcal meningitis A, and HPV. IntraHealth and UNICEF to print for national-level distribution.</li> <li>National-level workshop held for pool of 20 trainers to facilitate training at district level, including 4 districts in Dakar region and 1 in Louga.</li> <li>MCHIP/Senegal National Immunization Technical Advisor invited by Dr. Ndiaye to present on vaccine safety, supply, and management, AEFI surveillance; EPI management; and formative supervision for pediatric medicine students and professors at National Training School for Nurses and Midwives (spring 2013).</li> <li>Through his MLM course participation, as well as MLM curriculum revision supported by MCHIP, Dr. Ndiaye has introduced aspects of MLM modules into his pediatrician course and continues to advocate for use of EPI management in medical school and Inter-University Diploma of Vaccinology curricula.</li> </ul>	<ul style="list-style-type: none"> <li>District-level immunization trainings (ongoing).</li> <li>Teachers from medical schools now empowered with information to address managerial and operational aspects of EPI in training modules, and to encourage revisions to existing training curricula.</li> </ul>
<b>International workshops</b>	<p>Regional workshop on professionalization of logistics functions:</p> <ul style="list-style-type: none"> <li>35 participants from 11 countries and 8 institutions/NGOs attended this 3-day meeting, which covered challenges, intervention mechanisms, and roles of governments and partners to professionalize logistics in Africa. Two papers with resolution and recommendations prepared for regional-level EPI manager review as a result of this workshop.</li> </ul> <p>Africa Regional Conference on Immunizations:</p> <ul style="list-style-type: none"> <li>Aimed to redouble country and other immunization stakeholder commitments to fostering innovation in the fight against vaccine preventable diseases.</li> </ul> <p>TecNet21 Consultation meeting:</p> <ul style="list-style-type: none"> <li>Disseminated latest immunization technological innovations and provided platform for exchange knowledge, experiences, and best practices around vaccine management, transport, and equipment performance.</li> </ul> <p>WHO West Africa EPI Managers Meeting:</p> <ul style="list-style-type: none"> <li>EPI in West African countries reviewed, with a focus on RI, polio eradication, and control and elimination of priority vaccine preventable diseases (e.g., measles, MNT, Meningitides A and yellow fever).</li> <li>Experiences shared around sustainable integration of other child survival activities (e.g., Vitamin A administration, deworming) into immunization services.</li> <li>Discussion on upcoming Senegal MR campaign held with representatives from WHO/IST, UNICEF WCARO, MCHIP, and participants from Senegal.</li> </ul>	<ul style="list-style-type: none"> <li>Country and other immunization stakeholder representatives to carry discussion outcomes and recommendations back to their respective countries and/or teams for follow-up.</li> </ul>